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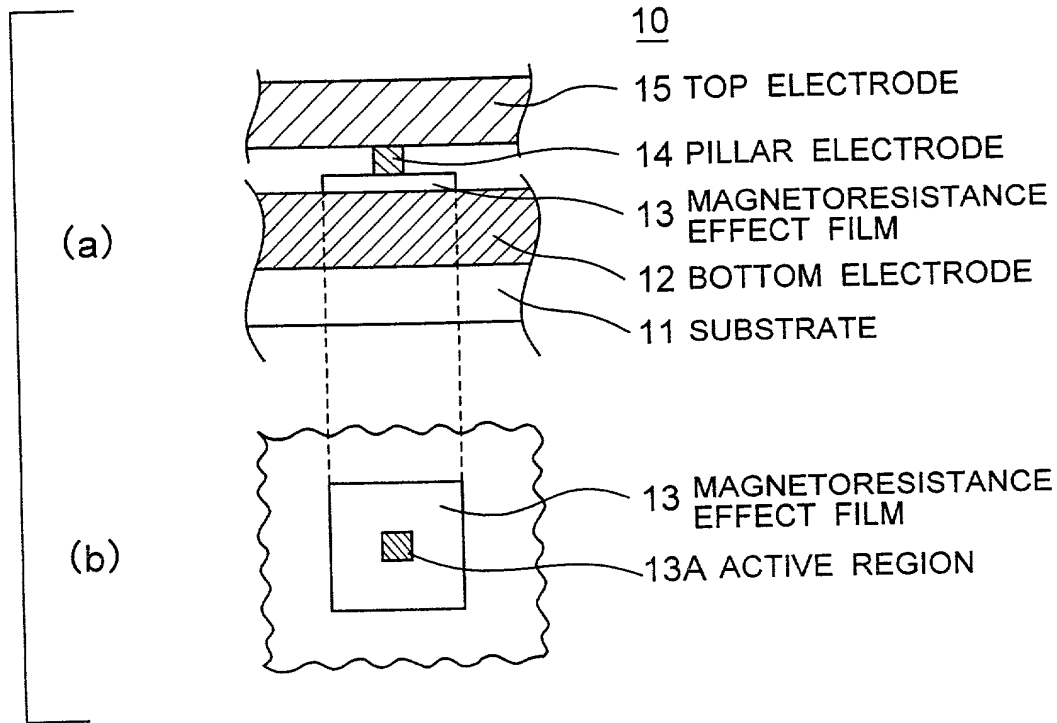


FIG. 1

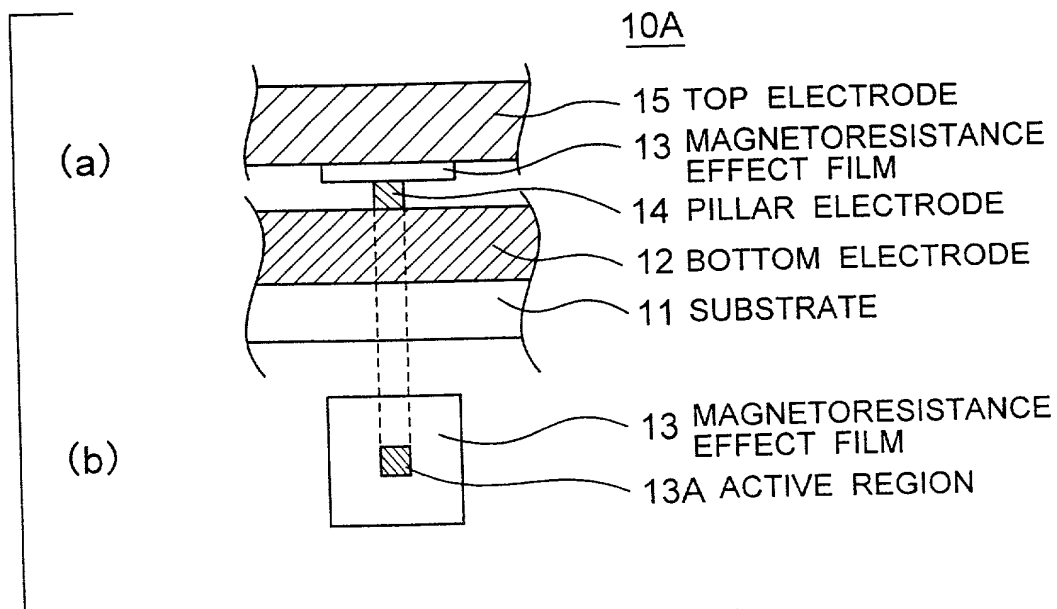


FIG. 2

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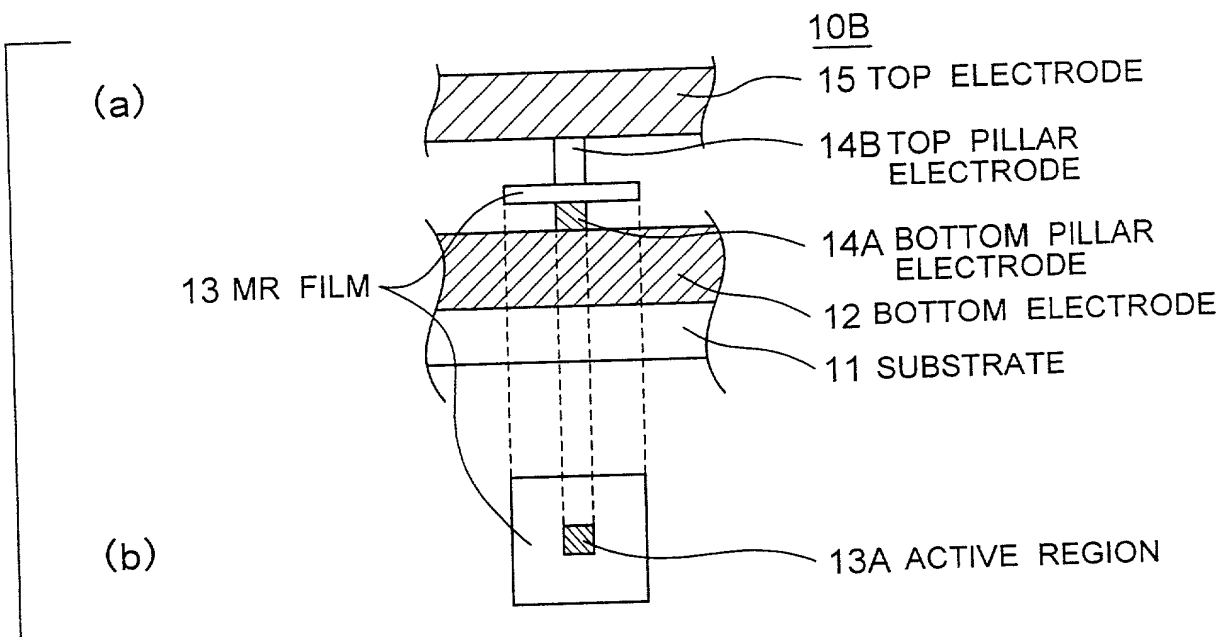


FIG. 3

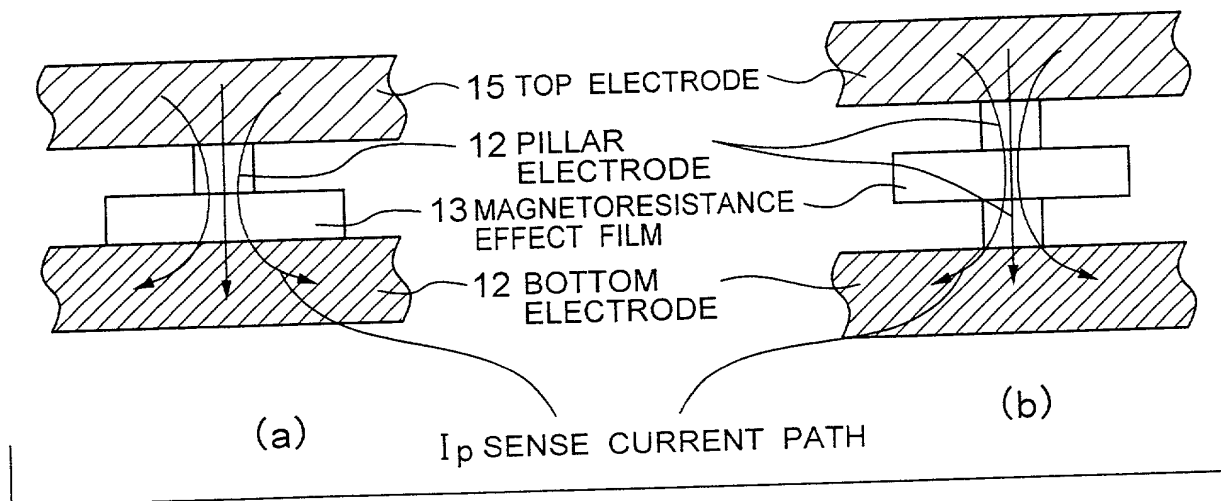


FIG. 4

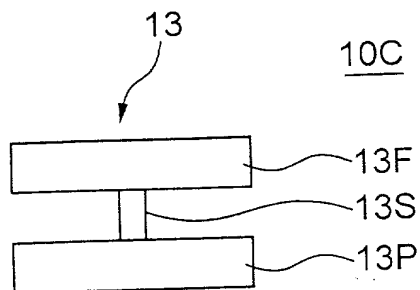


FIG. 5

The diagram shows two cross-sectional views of a magnetic structure. In (a), the magnetization vector in the free layer (13F) is shown as a uniform horizontal arrow pointing to the left. In (b), the magnetization vector in the free layer (13F) is shown as a uniform horizontal arrow pointing to the right. The biasing film (30) is shown as a hatched layer on the right side of the free layer. The magnetic flux from the medium (F) is shown as three upward-pointing arrows at the bottom of the structure.

FIG. 7

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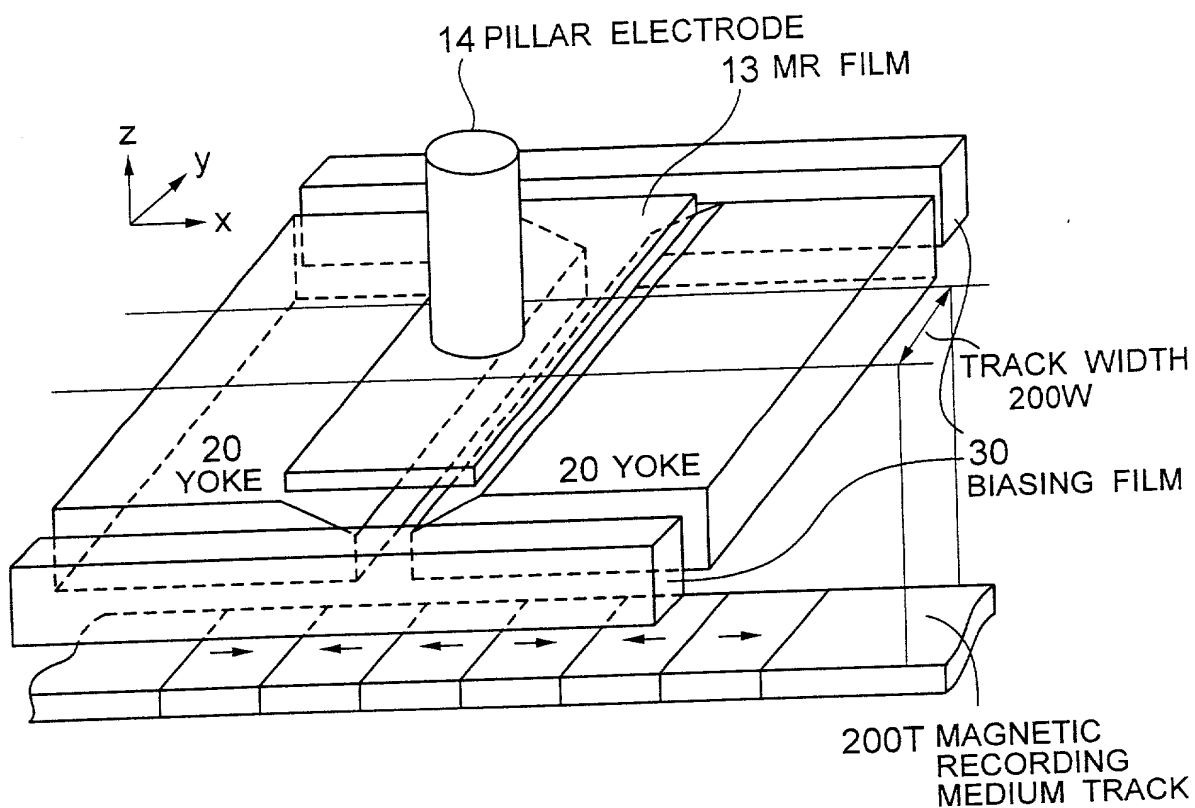


FIG. 8

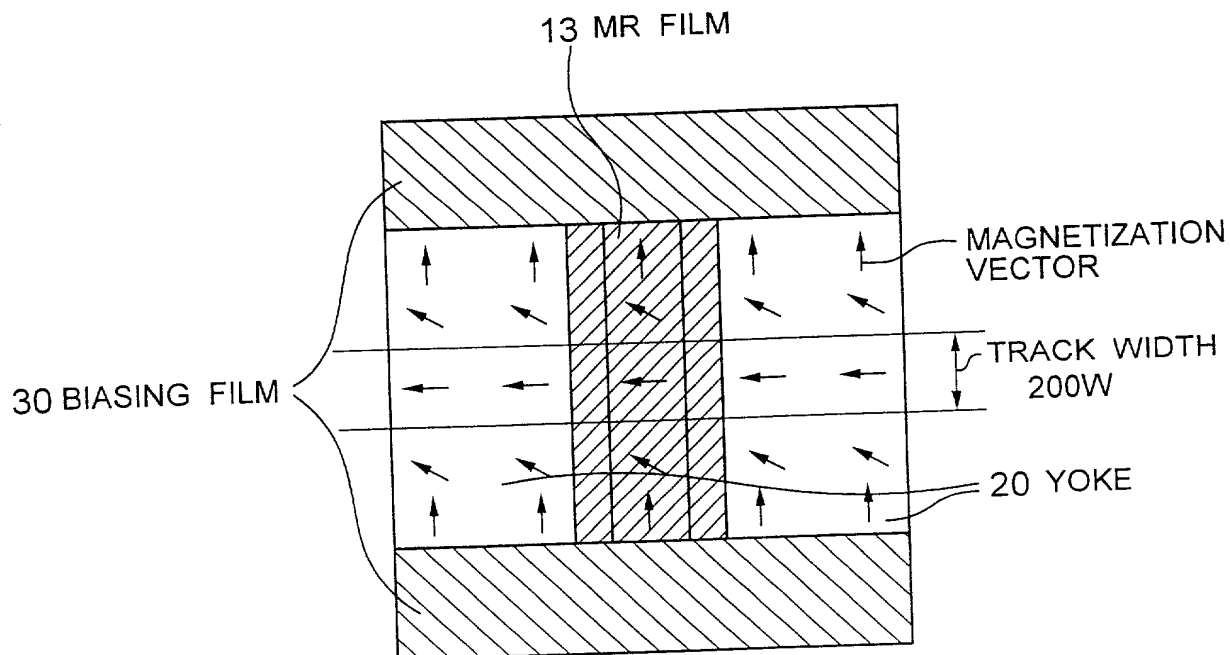


FIG. 9

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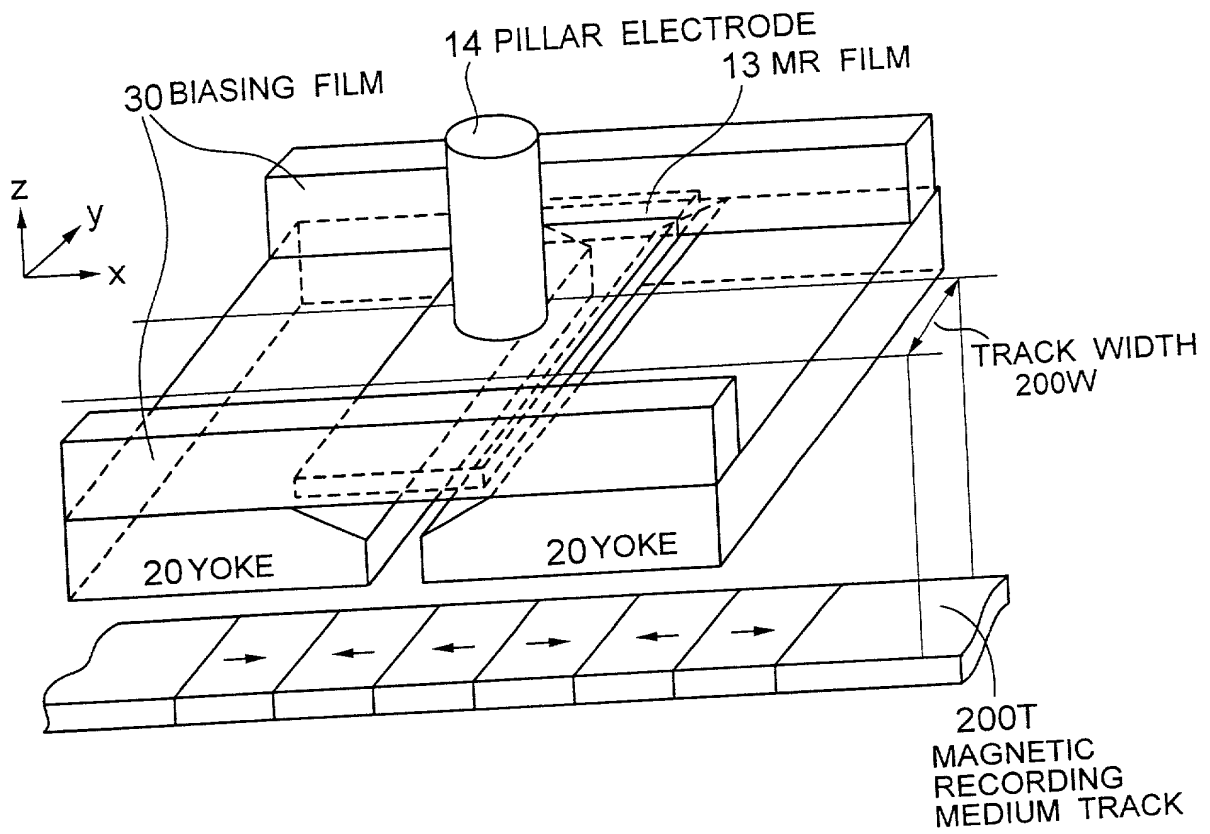


FIG. 10

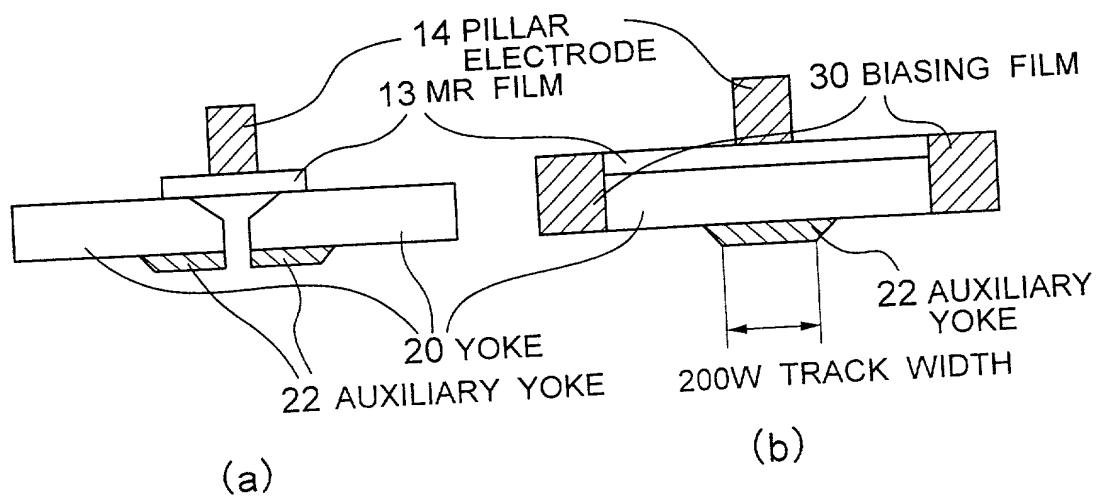
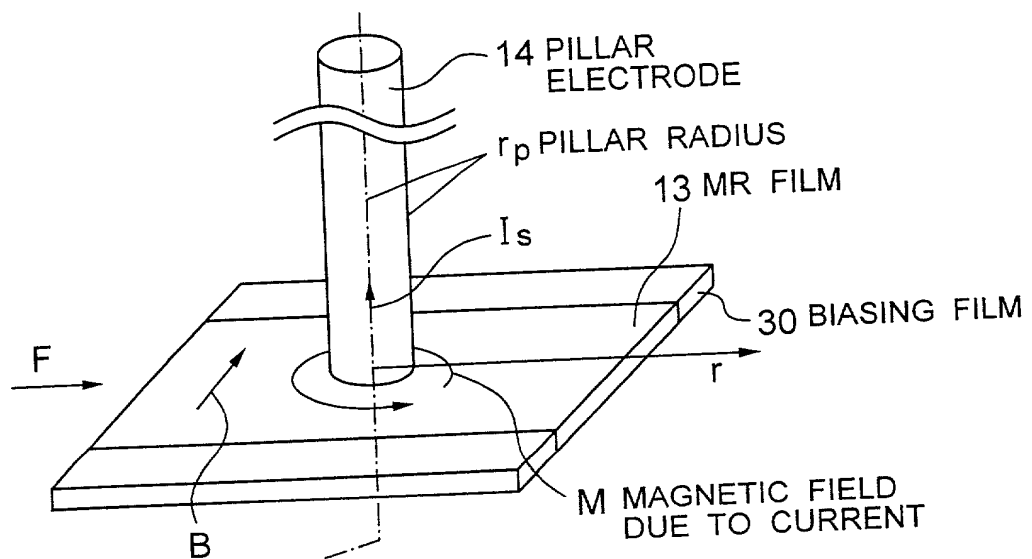


FIG. 11

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(a)



(b)

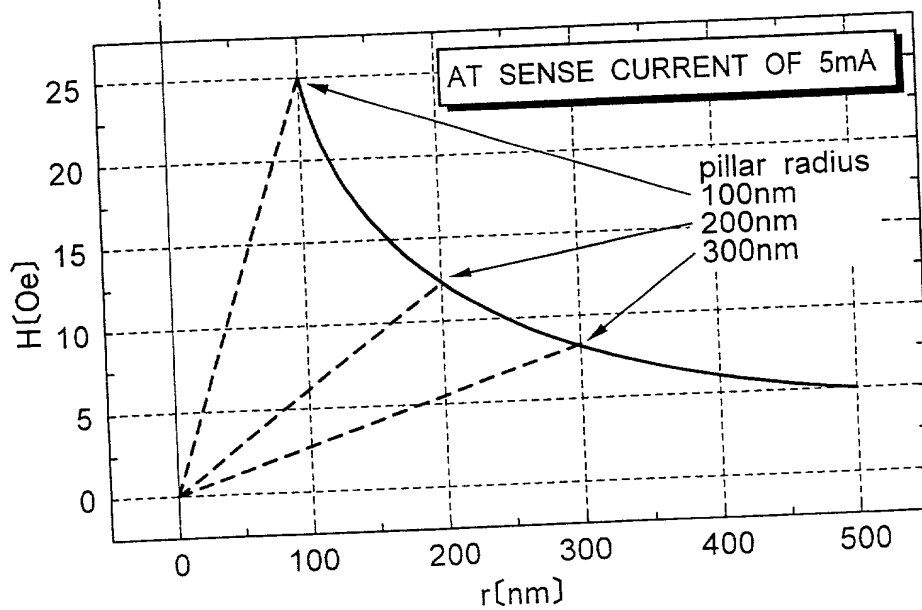


FIG. 12

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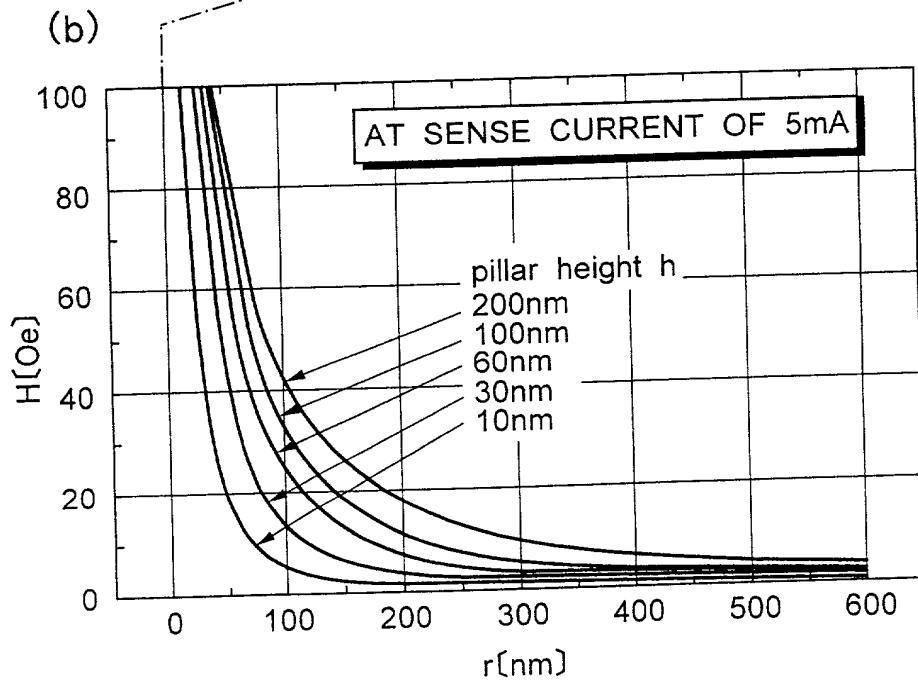
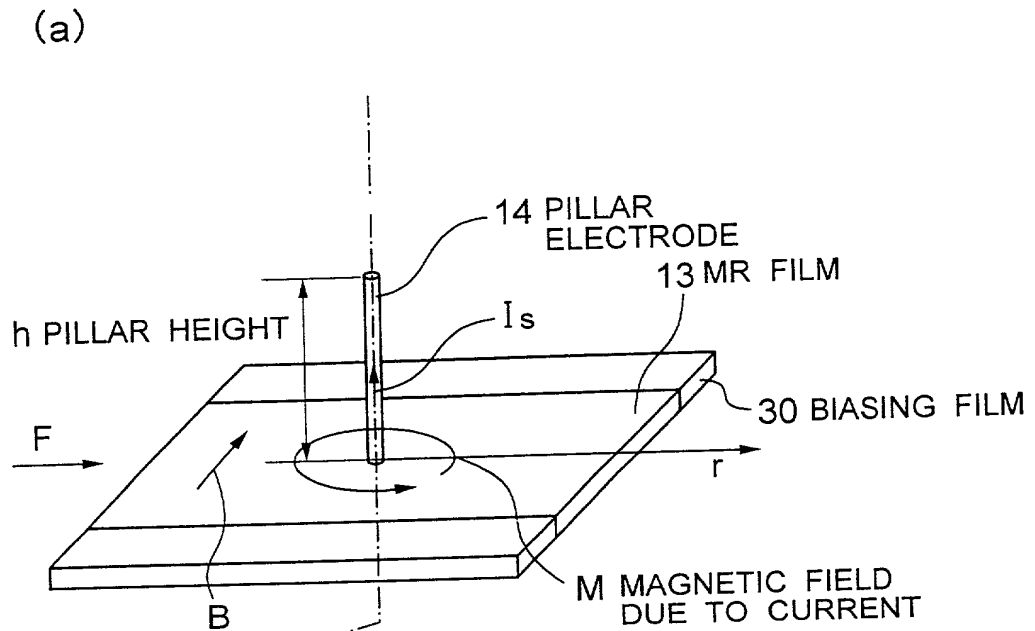


FIG. 13

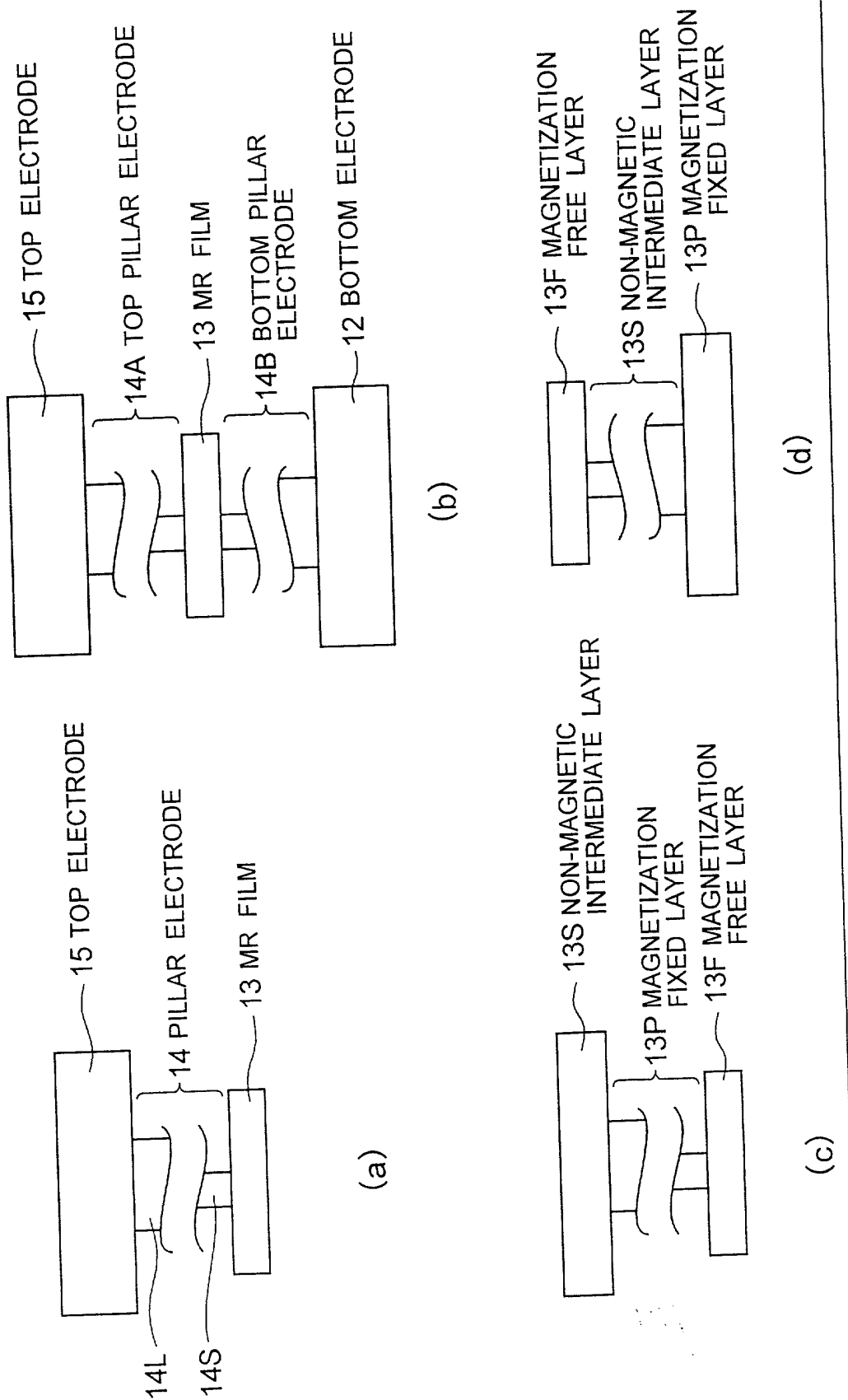


FIG. 14



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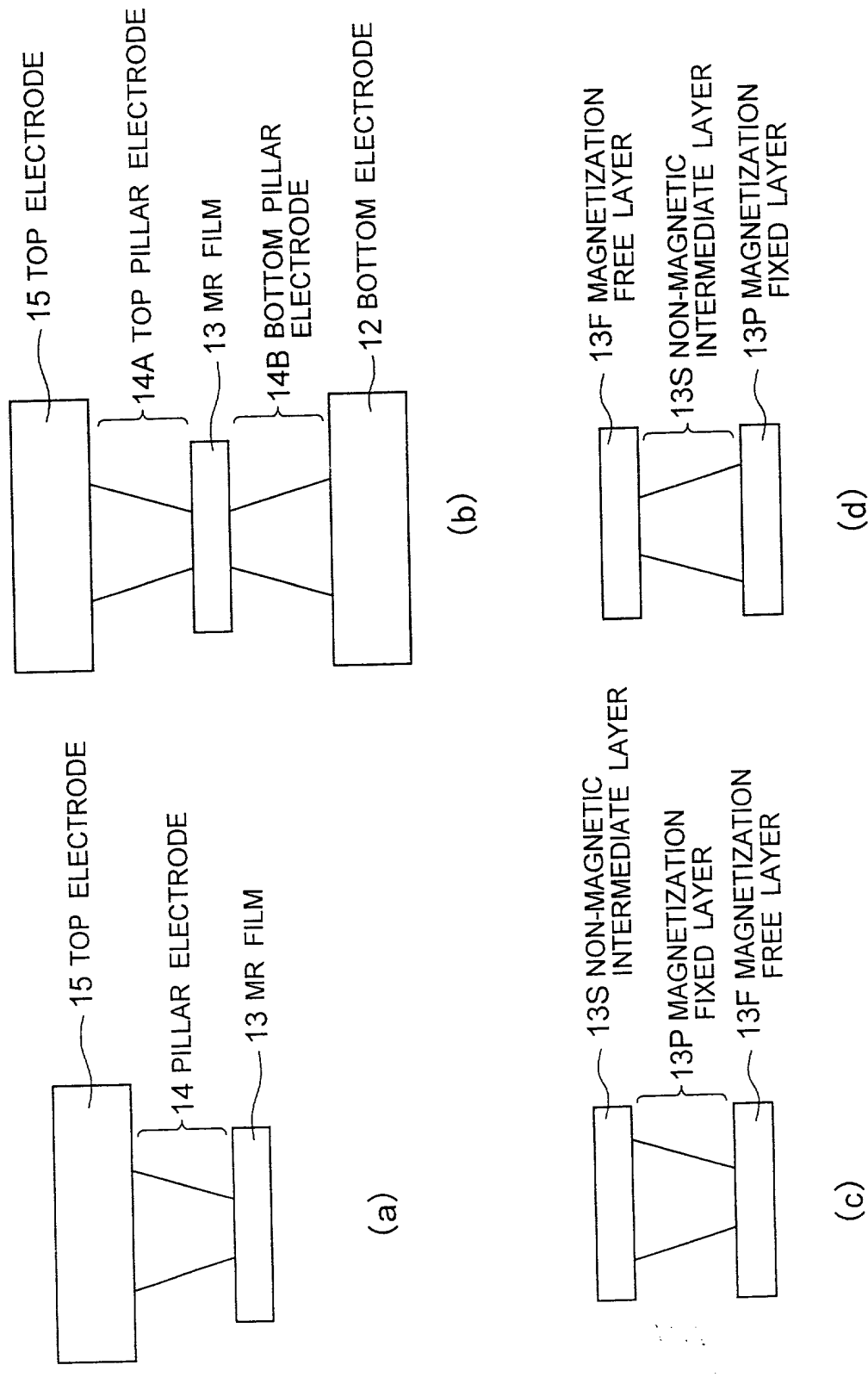


FIG. 15

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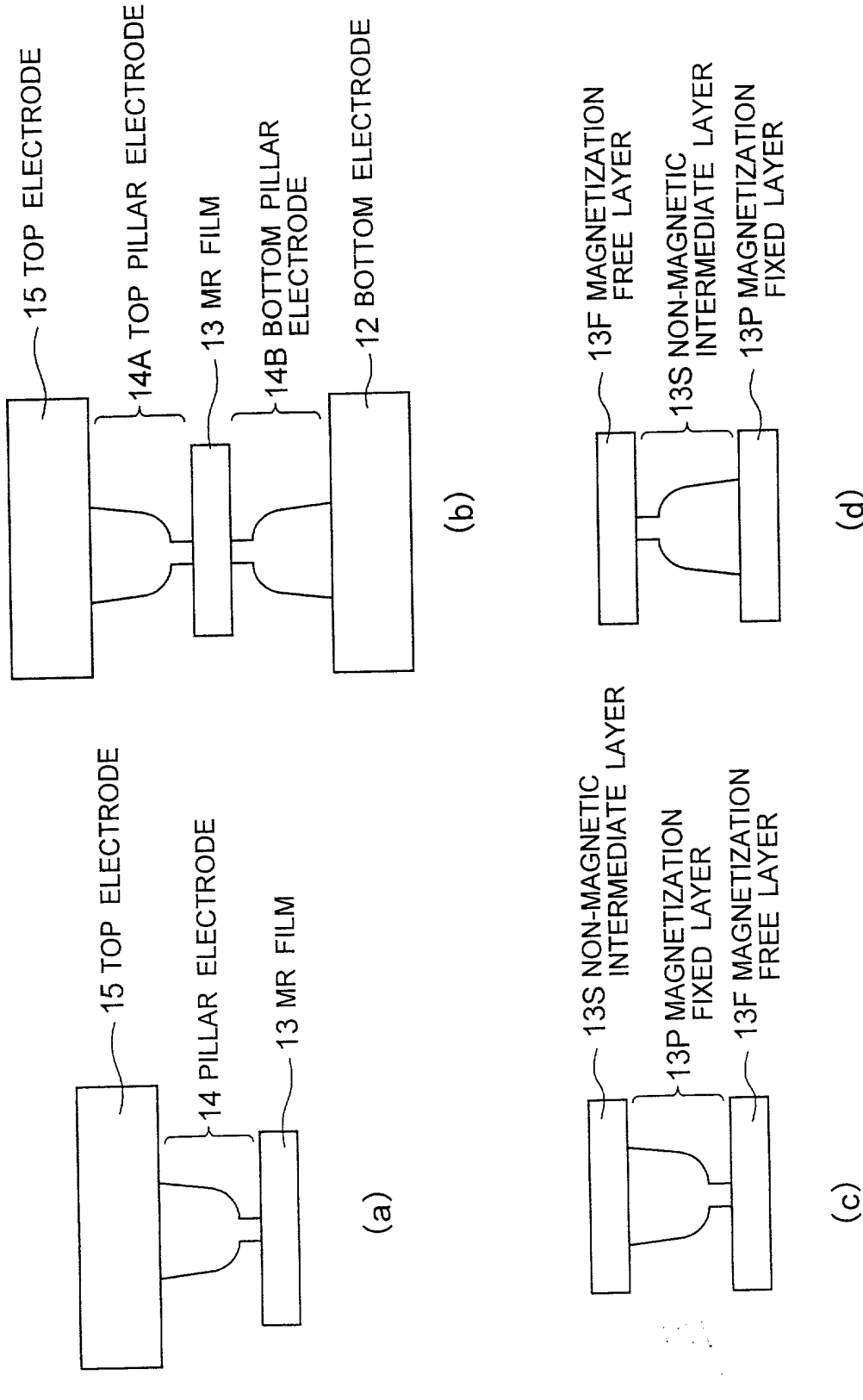


FIG. 16

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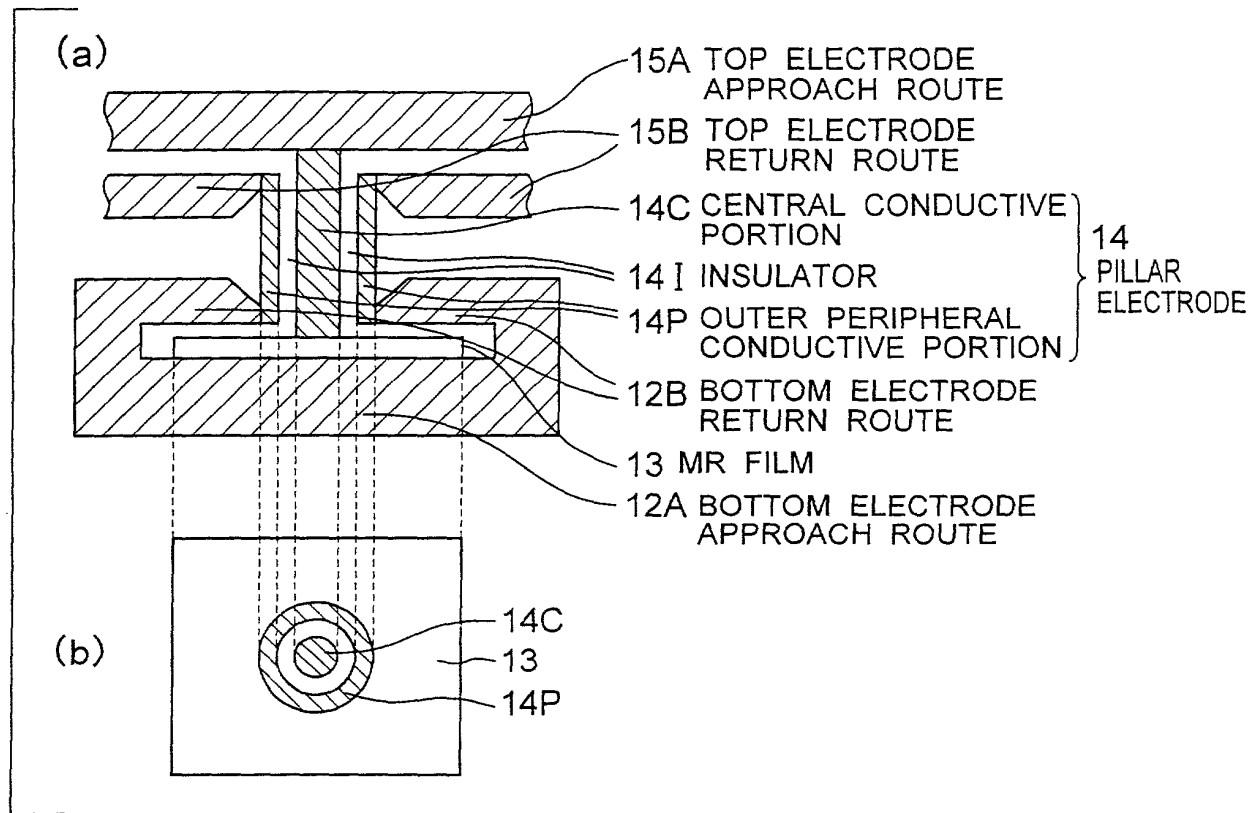


FIG. 17

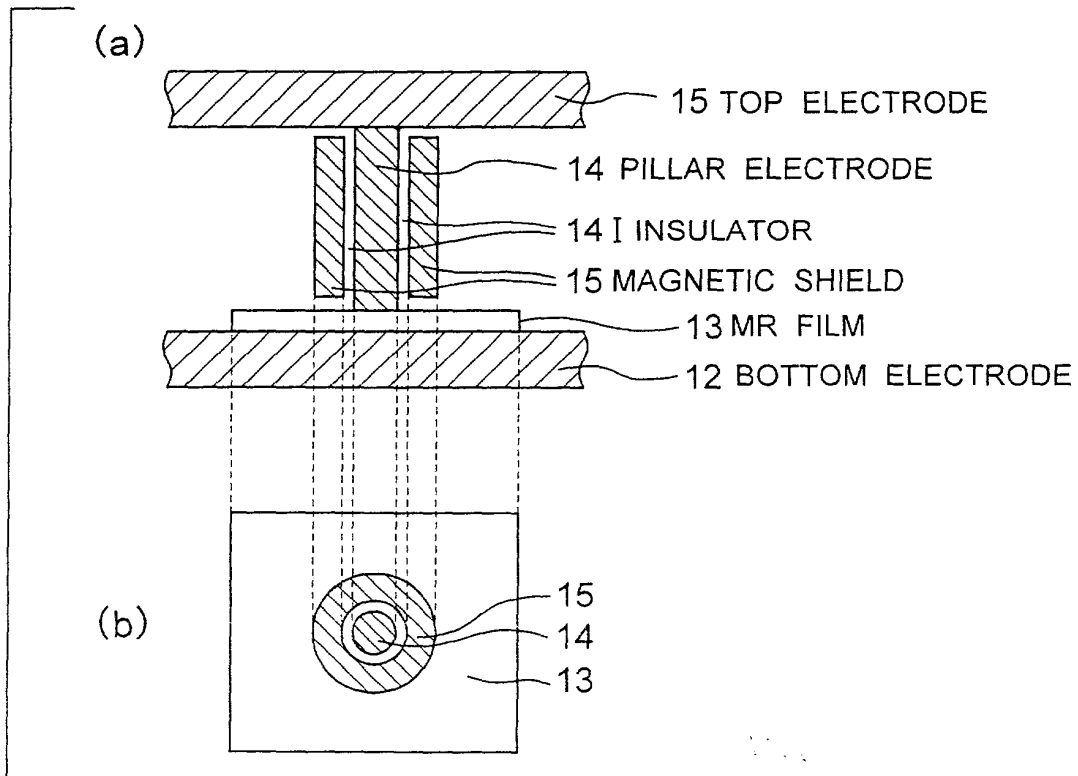


FIG. 18



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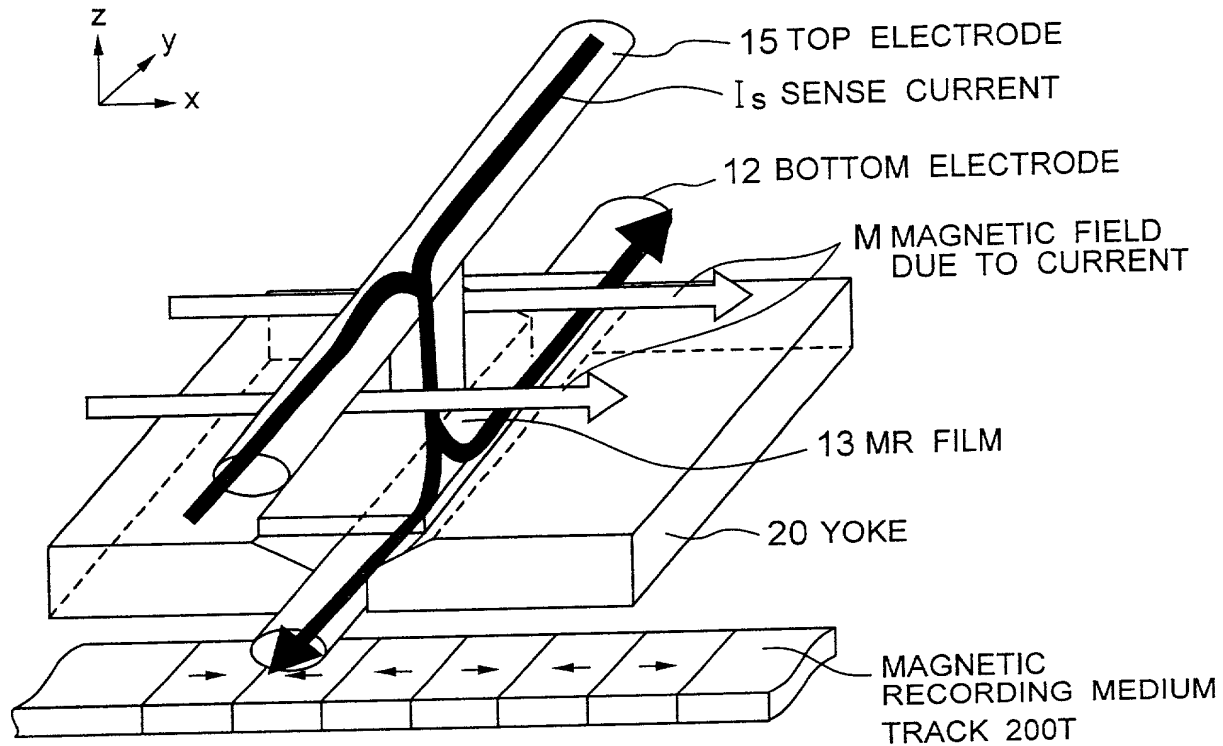


FIG. 20

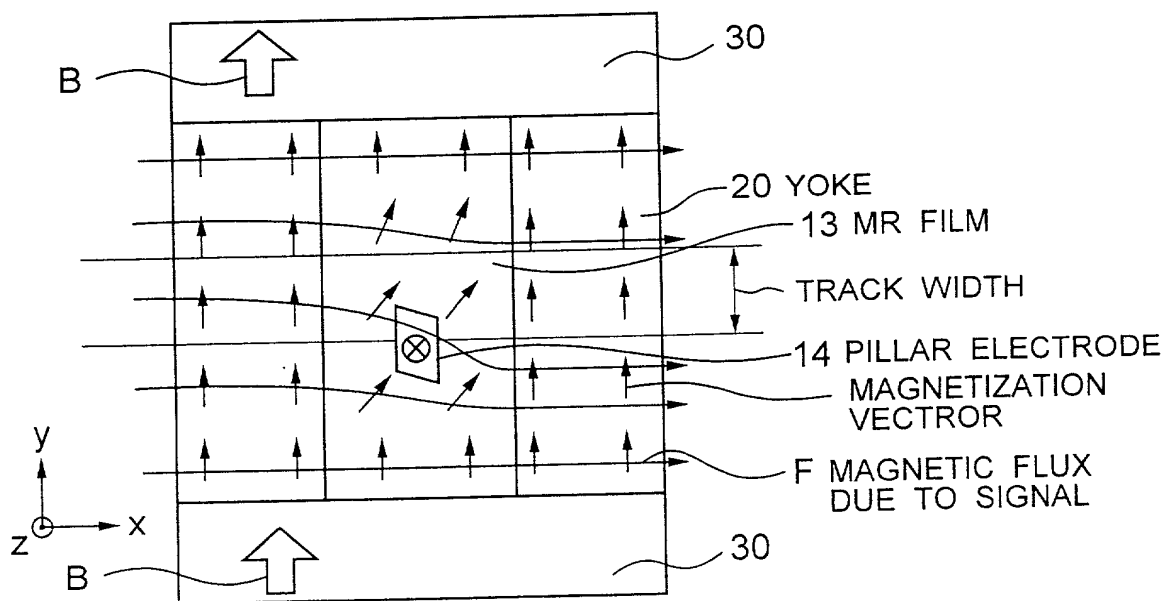


FIG. 21

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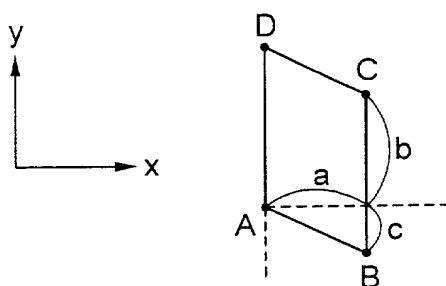


FIG. 22

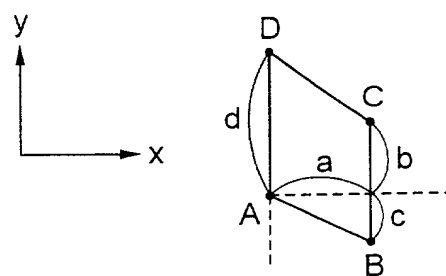


FIG. 23

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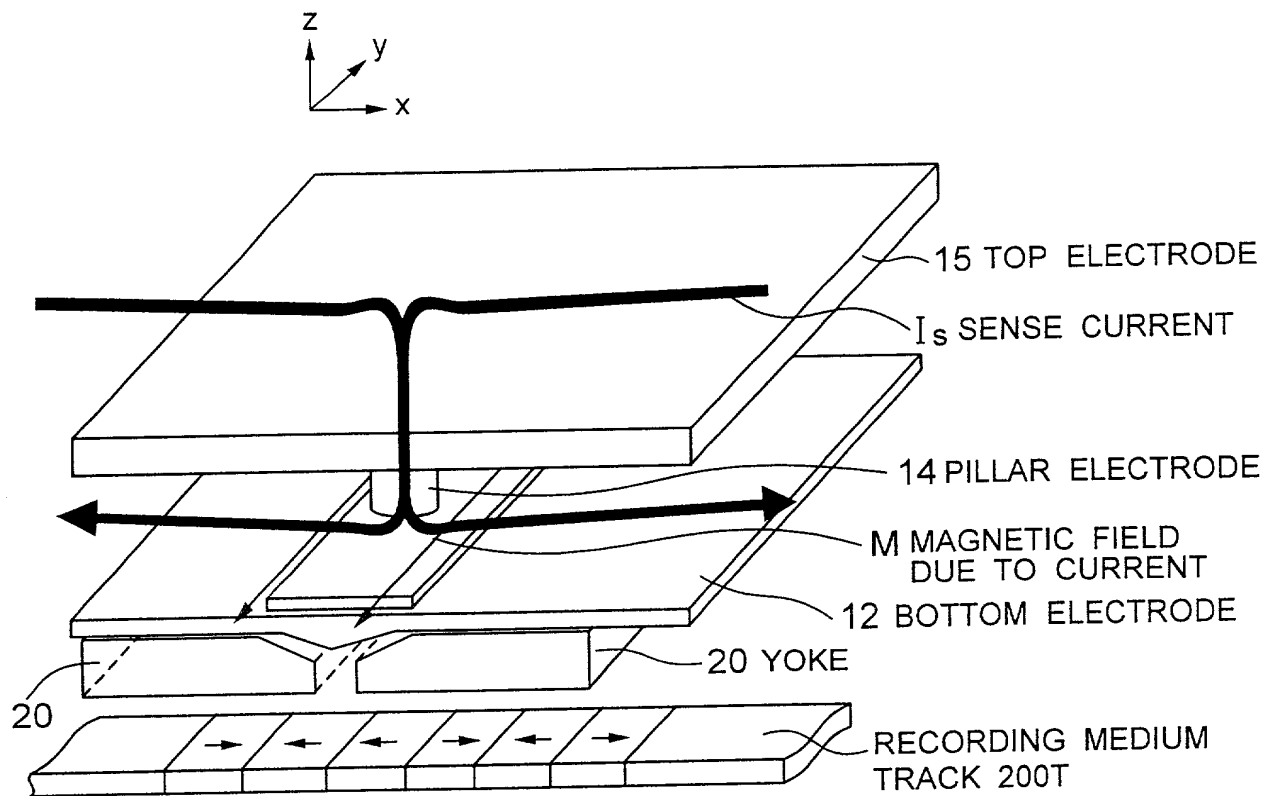


FIG. 24

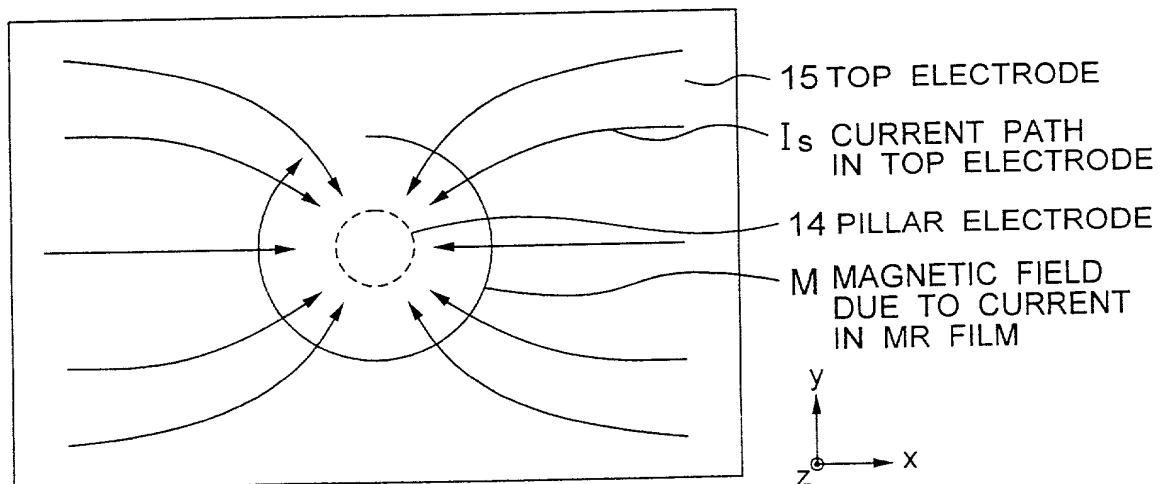


FIG. 25

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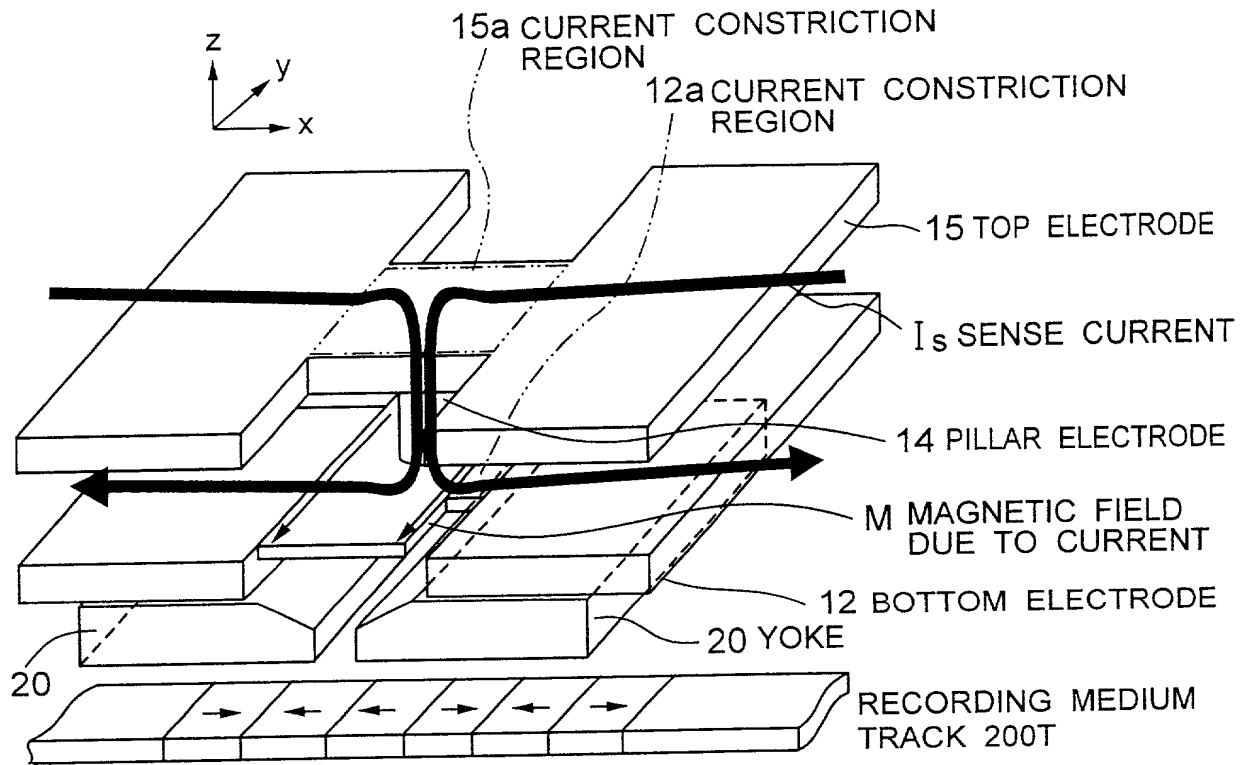


FIG. 26

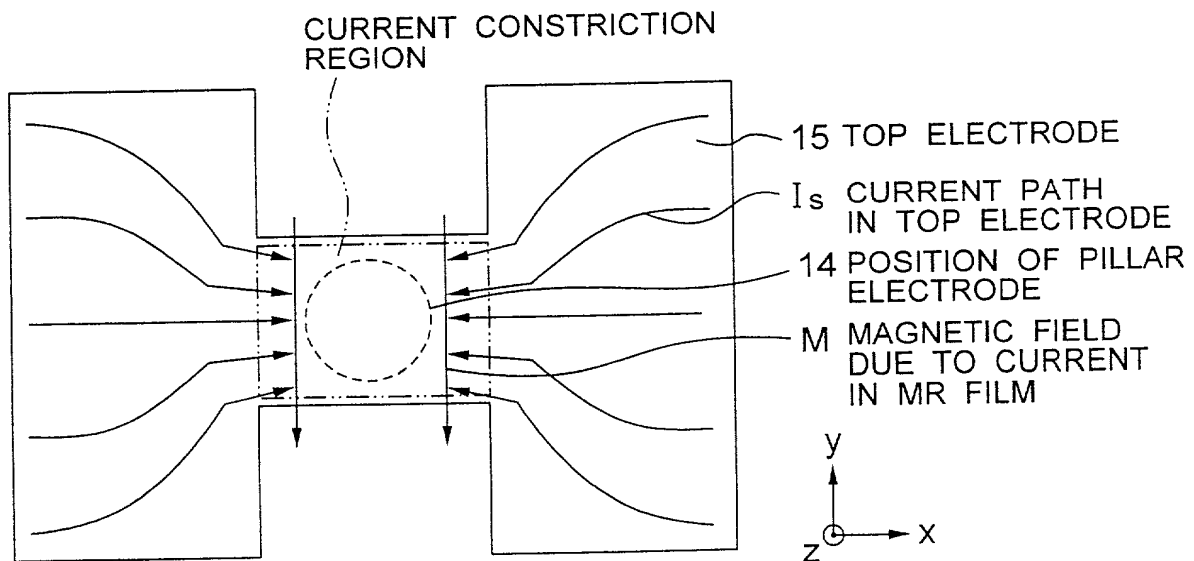


FIG. 27



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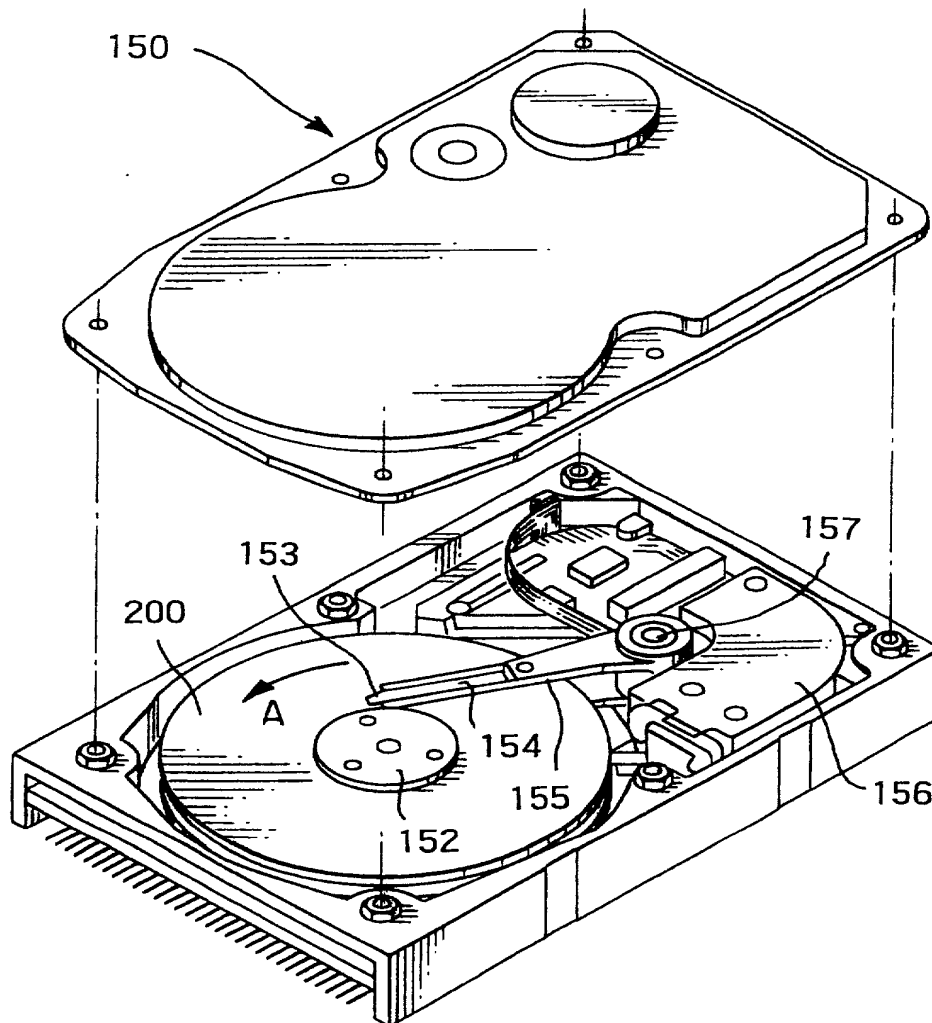


FIG. 28

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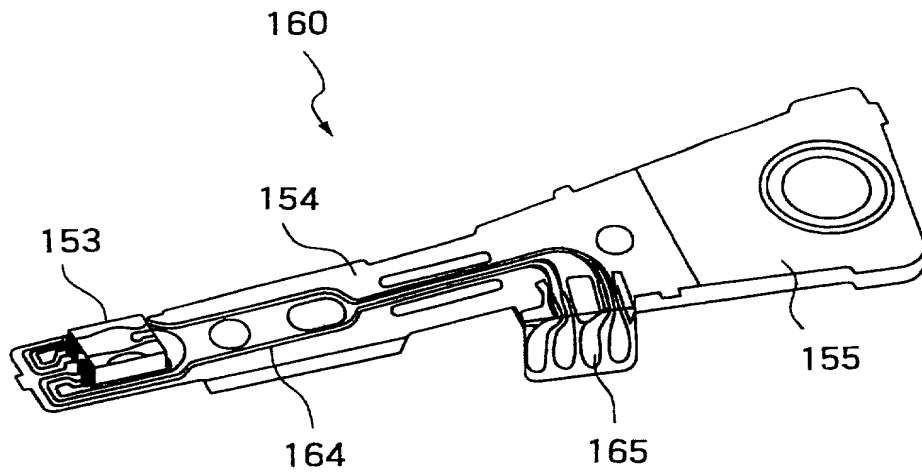
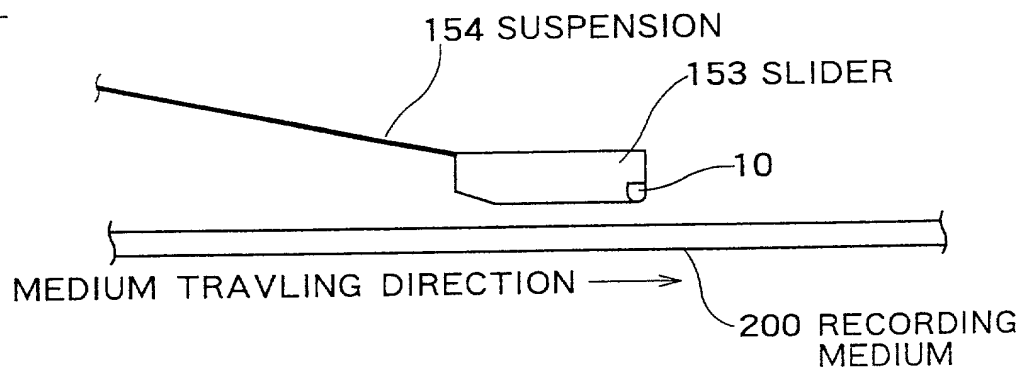


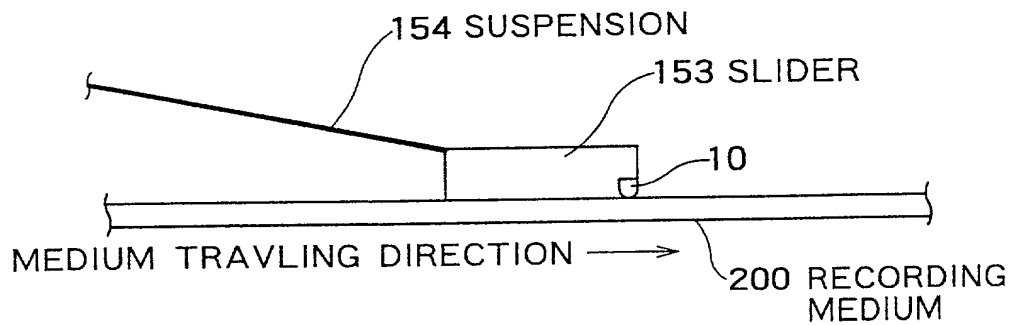
FIG. 29

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(FLOATING TRAVELING)

(a)



(CONTACT TRAVELING)

(b)

FIG. 30

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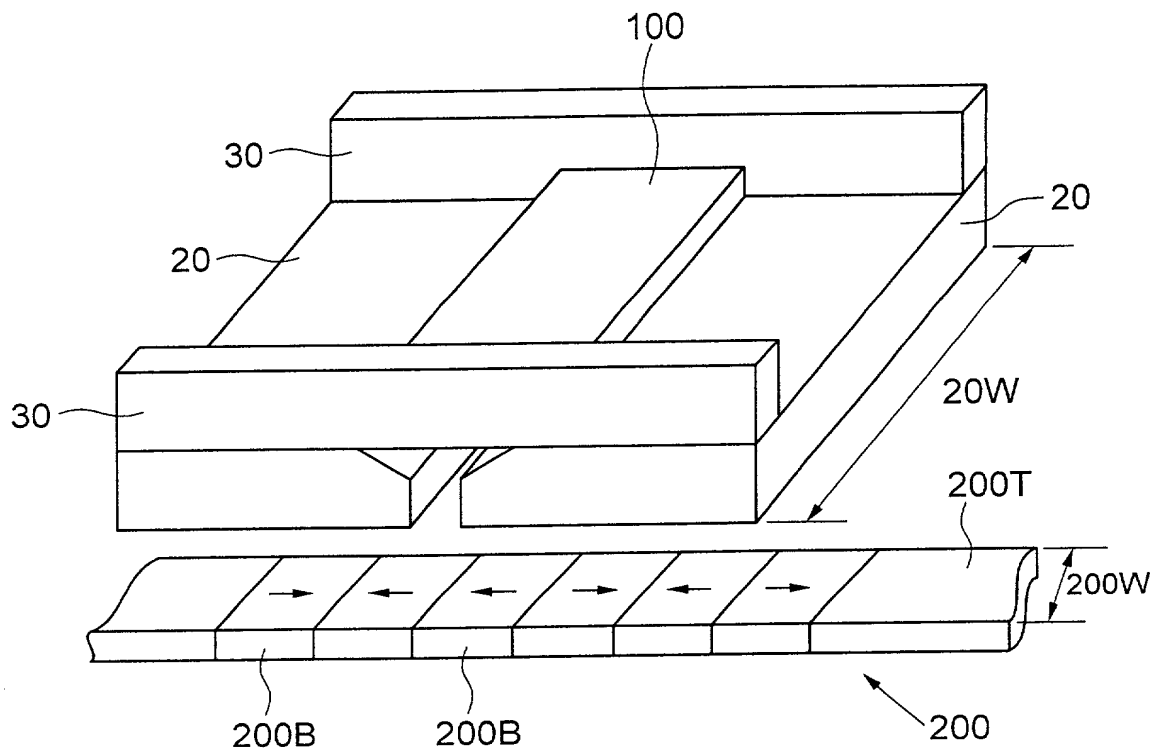


FIG. 31